2001

Annual Report

State of Idaho

Department of Environmental Quality

Director's Message

Dear Reader,

Six months ago, the Legislature transformed the Idaho Department of Health and Welfare's Division of Environmental Quality into a stand-alone Department. I am pleased to report to you that, in this very short time, the Department of Environmental Quality (DEQ) has undergone unprecedented changes in the way business is conducted. A new level of accountability for our spending and prioritization of work provides tools that I believe are unmatched in state government. This report provides you with a picture of the re-focusing of our efforts. Our new Time Tracking System allows calculation of per-unit cost as well as providing an accurate picture of where we are spending time and effort. This system will be refined over the next year to increase our efficiencies.

Over the past year, we have focused on prioritizing our activities where Idaho needs us the most. We are continuing to find efficiencies in our efforts. The changes we are making in our management system will give the citizens of Idaho confidence in the Department to be accountable, predictable and consistent in the delivery of its programs and services.

The Department of Environmental Quality's 2001 Annual Report provides you with our progress towards addressing issues identified in last year's report. These issues have become focal points in our strategic planning process.

The agency is determined in its pursuit to apply resources more flexibly toward Idaho's environmental priorities. Our management system and planning efforts provide a clear link between environmental needs and agency budget, as well as the results we have achieved. It is my hope that these methods will help DEQ in its objective to protect the health of the citizens of Idaho and the environment they have chosen as their home.

C. Stephen Allred, Director
Department of Environmental Quality

Table of Contents

Getting Results

This 2001 Annual Report is an update of the Department of Environmental Quality's (DEQ's) accomplishments on a number of issues that were defined in the 2000 Annual Report. The issues have become departmental priorities and are addressed in the 2001-2006 Strategic Plan.

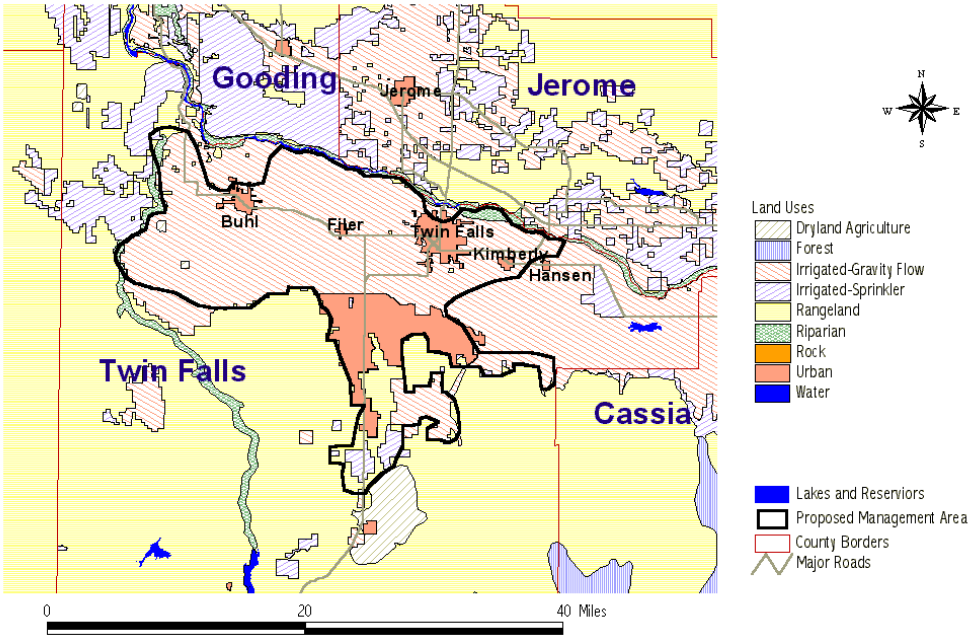
Ground Water

Areas of ground water contamination have been identified in Idaho. In many of the rural areas affected, the residents depend upon ground water as their source of drinking water. Twenty percent of Idaho's population is served by private wells. In order to correct existing problems, DEQ has developed a process that brings together local interests to address the contamination problems.

The Salmon Falls/Rock Creek Ground Water Quality Area in Twin Falls County has brought together local interests, agencies, and the public to address nitrate-related ground water quality problems in that area. (See map.) The committee is developing an action plan for the area by June of 2001.

Accomplishments

- Policy addresses degraded ground water quality areas.
- The Ground Water Monitoring Technical Committee developed a process to prioritize the 33 nitrate areas.
- DEQ contracted with the U.S. Geological Survey to analyze nitrate trends.
- DEQ developed strategies for high-priority nitrate areas.

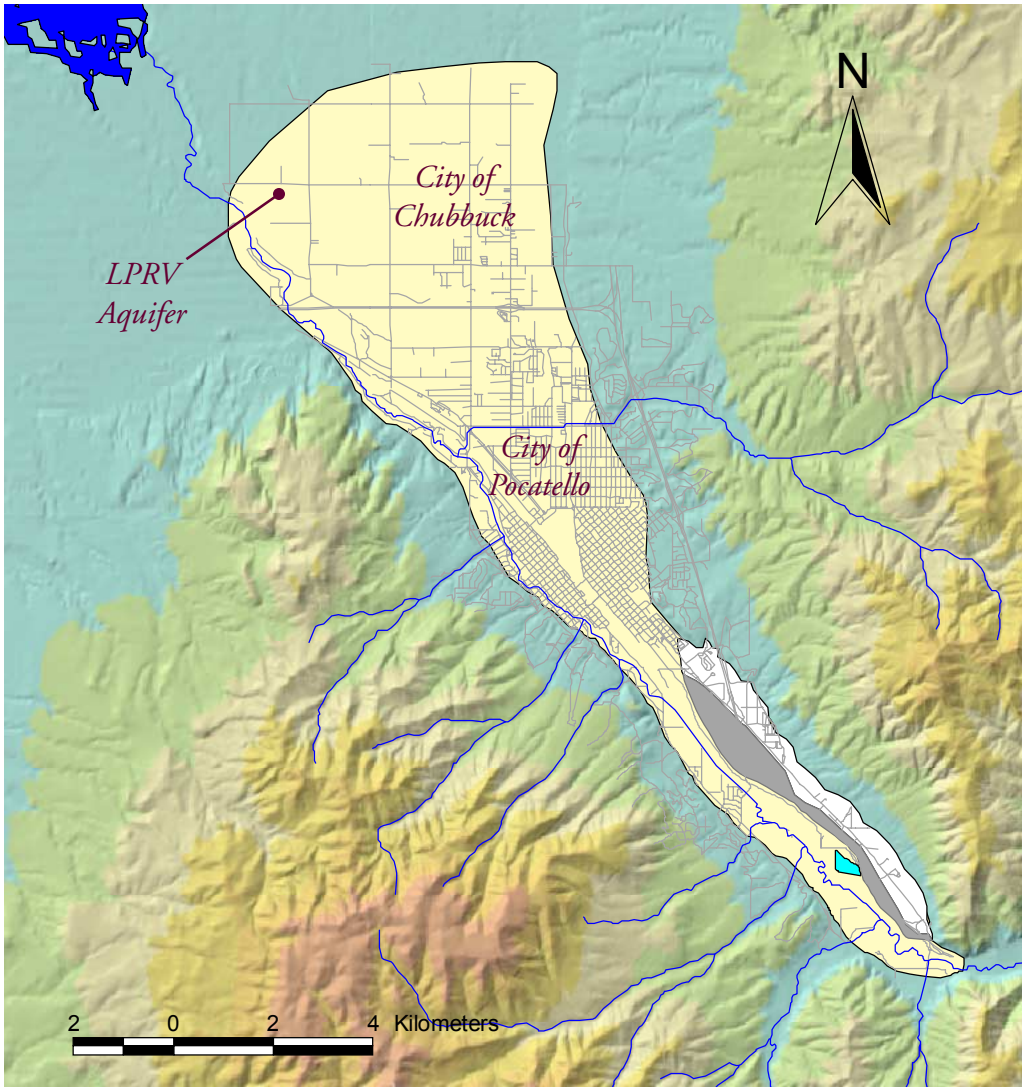


Map of Salmon Falls/Rock Creek Proposed Ground Water Quality Area

Growth and its associated activities have impacted the Lower Portneuf River Valley (LPRV) aquifer. An LPRV Aquifer Protection Working Group was formed in January of 2000 to explore options for addressing the existing problems. It is considering management methods to protect the aquifer, as well as adding additional regulatory requirements through changing the designation of the aquifer from General Use to Sensitive Resource categorization, as allowed in the Ground Water Quality Rule. The group will facilitate a collective decision on whether the enhanced protection (tailored to local needs) is necessary. The impact analysis is to be completed in early 2001.

Focus Areas for Aquifer Protection

- Septic sewage disposal both on the Lower Portneuf River Valley aquifer and on tributary aquifers.
- Urban storm water runoff disposal over the aquifer and adjacent areas.
- Storage and handling of hazardous materials, fuels, and non-domestic wastewater over the Lower Portneuf River Valley Aquifer and on tributary aquifers.



Lower Portneuf River Valley Aquifer, Pocatello Area, Idaho

Airshed Management

Treasure Valley

The airshed approach, first applied in the Treasure Valley, is replacing the air quality management of the past. The Treasure Valley is implementing a comprehensive airshed management program dealing with multiple pollutants from multiple sources and addressing both short- and long-term air quality needs. This approach is targeted at maintaining air quality in a region experiencing tremendous growth and is designed to prevent the expansion of air quality problems within the valley.

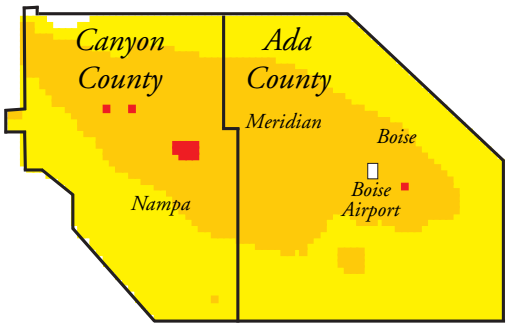
The initial definition of the Treasure Valley Airshed will be limited to Ada and Canyon Counties. As growth continues, there will be more cars, congestion, business, and industries adding to the valley's pollution. Modeling shows potential problems even at current emission levels. Through this approach, we are hoping to avoid the trend indicated by the 2010 Modeling (see below). The definition of the management area may be modified during program development as additional data becomes available and outreach efforts are expanded.

Accomplishments

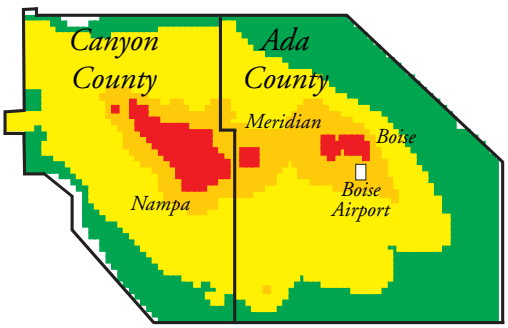
- Collaborated with Canyon County Commissioners to involve citizens and businesses in the western portion of the airshed.
- Held public workshops engaging residents in determining the most pressing air quality concerns and the most acceptable local solutions in addressing those concerns.
- Encouraged and assisted implementation of those solutions through local ordinances.
- Developed a timeline for the Airshed Management Plan.
- Held regular public meetings providing information on current air quality issues.
- Established a multi-agency Scientific Technical Review Committee.
- Created an Airshed Advisory Group.
- Updated industrial permitting to reflect airshed priorities.
- Received funding and equipment for the measurement of ozone.
- Completed secondary aerosol particulate matter study.
- Assisted in a negotiated settlement of lawsuit over air quality designation in Ada County.
- Defined boundary for the Treasure Valley Airshed.

Modeled Air Pollution Levels in the Treasure Valley Airshed

1995 Particulate Emissions (Stagnation Weather Conditions)



2010 Particulate Emissions (Average Weather Conditions)



Exceedance

High Moderate (100-150 µg/m³)

Low Moderate (50-100 µg/m³)

Good

Portneuf Valley

During the past year, the Portneuf Valley airshed exceeded the Ambient Air Quality Standards on three occasions. The Airshed Management Program in the Portneuf Valley is developing a management plan to address the problems and ensure compliance with air quality standards.

Portneuf Valley Airshed Update

- Established the first multi-jurisdictional airshed management program in Idaho.
- Held regular public meetings providing information on current air quality issues.
- Established:
  - Scientific Technical Review Committee to review and comment on agency research.
  - Multi-agency committee to coordinate air quality protection efforts among state and local agencies.
  - Airshed Advisory Group.
- Modified industrial permitting to reflect airshed priorities.
- Conducted first community based Supplemental Environmental Projects (SEP's) in the state.
- Successfully worked with the Shoshone-Bannock Tribes to implement Reasonably Available Control Technology (RACT) on primary air pollution sources.
- Initiated "hot spot" Sulfur Dioxide (SO_2) monitoring to better understand SO_2 emissions from phosphate refinery process.

Selenium

Selenium is a naturally occurring metal found primarily in waste rock from phosphate mining in southeast Idaho. Previous livestock deaths in parts of the phosphate region have been linked with areas of high selenium levels.

The State of Idaho is taking a lead role in remedying water quality impacts from selenium and other contaminants associated with ongoing and inactive phosphate mines in southeastern Idaho. DEQ's efforts are geared toward the investigation and prioritization of clean-up activities at inactive mines. With regard to ongoing activities at the active mines, DEQ will ensure that industry-developed Best Management Practices are followed. All DEQ's efforts in the region will tie into the Total Maximum Daily Load process in the affected watersheds.

Accomplishments

- Implemented an area-wide scope of work covering investigation and establishment of clean-up objectives.
- Reviewed numerous sampling events and research studies by mining companies and agencies.
- Compiled a series of Best Management Practice guidance manuals to help reduce potential impacts from current and future mining operations published by the Idaho Mining Association Selenium Committee.
- Entered into a Memorandum of Understanding with several federal agencies and the Shoshone-Bannock Tribes to ensure coordination and collaboration in mine clean-up efforts.
- Began a dialogue with the responsible mining companies to put in place an agreement for DEQ to recover the costs of its oversight of clean-up activities, and to conduct site-specific clean-ups of mine sites. DEQ will have primary oversight of several site-specific remedial actions and will participate in a number of other mine clean-ups managed by the U.S. Forest Service.
- Commenced the process to establish a DEQ Soda Springs Project Field Office in 2001.
- Assumed the role of lead agency in the implementation of an area-wide investigation to:
  - assess the risks associated with inactive mines,
  - review data to determine sampling requirements for the 2001 field season, and
  - develop clean-up standards to be applied in mine remediation projects.

Total Maximum Daily Load

Idaho is in its third year of developing watershed-by-watershed plans for the protection and clean up for our surface waters. Under a legal agreement, Idaho is working with Basin Advisory Groups and Watershed Advisory Groups (volunteer citizen groups) to develop Total Maximum Daily Loads (TMDLs) for water quality-impaired rivers and streams. TMDLs set maximum levels for pollutants that are discharged into given water bodies.

TMDL Status (Stream Segments)	
Total TMDL Scheduled to Date	529
TMDLs Approved	172
EPA Approved De-listings	91
TMDL not required under Clean Water Act	62
TMDLs Officially re-scheduled	23
TMDLs completed ahead of schedule	33
TMDLs submitted but not acted upon	43
Segments proposed for de-listing	81
Temperature deferrals	28

TMDLs to be Completed in 2001

- Mid Snake River — Payette
- South Fork Coeur d'Alene River
- Upper Salmon River
- South Fork Clearwater River
- Middle Bear River
- Big Wood River
- Brownlee Reservoir
- Pahsimeroi River
- Upper Owyhee River

A suit has been filed against EPA over the pace of the TMDL development in Idaho. The table at left shows the status of the TMDL development in Idaho. DEQ, EPA, and the plaintiffs are currently in settlement negotiations.

Last year DEQ received $250,000 for the development of the TMDL for Brownlee Reservoir. The states of Idaho, Oregon, and the Idaho Power Company view the development of this TMDL as a priority. A 22-member public advisory team is in place and is working on developing the TMDL.

Idaho is committed to completing:

- 9 TMDLs in 2001
- 10 TMDLs in 2002
- 9 TMDLs in 2003
- 11 TMDLs in 2004
- 8 TMDLs in 2005

Coeur d'Alene River Basin

The State of Idaho continues to move forward with its remediation strategy for the Coeur d'Alene River basin. DEQ's proposed strategy promotes the long-term economic vitality of the Basin, and addresses the actual clean up of waste from years of mining and milling operations. The proposed strategy allows clean-up projects to be prioritized and scheduled based on impact to human health, contamination levels in water, and available resources.

With DEQ's Help...

Accomplishments in the Bunker Hill Superfund Site

- Seeded over 300 acres of denuded hillsides.
- Remediated 200 residential yards, 15 commercial properties, and 84 rights-of-way.
  Total residential yards remediated to date = 1804
- Covered 200-acre Central Impoundment Area.
- Facility will be fully closed in 2001.
- Remediated Lower Government Gulch.
- Removed 50,000 cubic yards of tailings from the South Fork of the CDA River.
- Remediated county airport residential area.

Accomplishments in the CDA Basin

- Completed State clean-up plan.
- Initiated process to identify community clean-up plan.
- Initiated planning for six other remediation demonstration and pilot projects.
- Installed seep treatment system at the Success Mine Dump.
  Phase I of the project was 98% completed in 2000.
  Phase 11 scheduled for completion next construction season.
  Cost = $1.2 million (compared to an estimated cost of $4.0 to $6.0 million for a traditional method.)
- The Interstate Project removed 60,000 cubic yards of contaminated tailings and placed them in an on-site repository. Initial water quality sampling indicated some 80% reduction in zinc.
  Project cost = $542,587

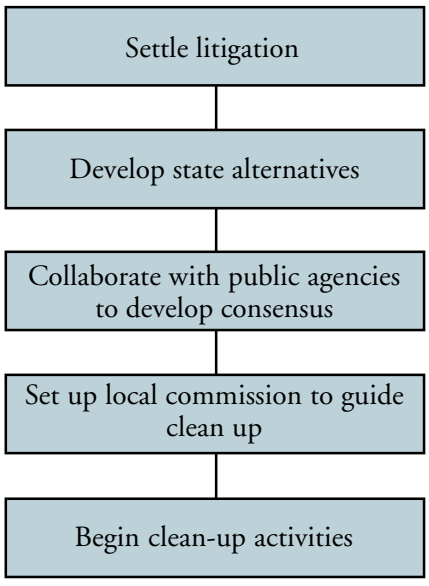
Elements of a Successful Clean Up

- Remove the litigation umbrella as early as possible.
- Enhance local decisions and public input.
- Open dialog about how to resolve environmental issues rather than how to win a lawsuit.
- Give flexibility to work through other processes as necessary.

Key Milestones

- July 2000: DEQ initiates a community consensus process to frame the issues surrounding clean up.
- September 2000: DEQ releases its draft clean-up plan.
- Draft legislation has been proposed to establish a locally based organization to provide clean up.

DEQ Strategy

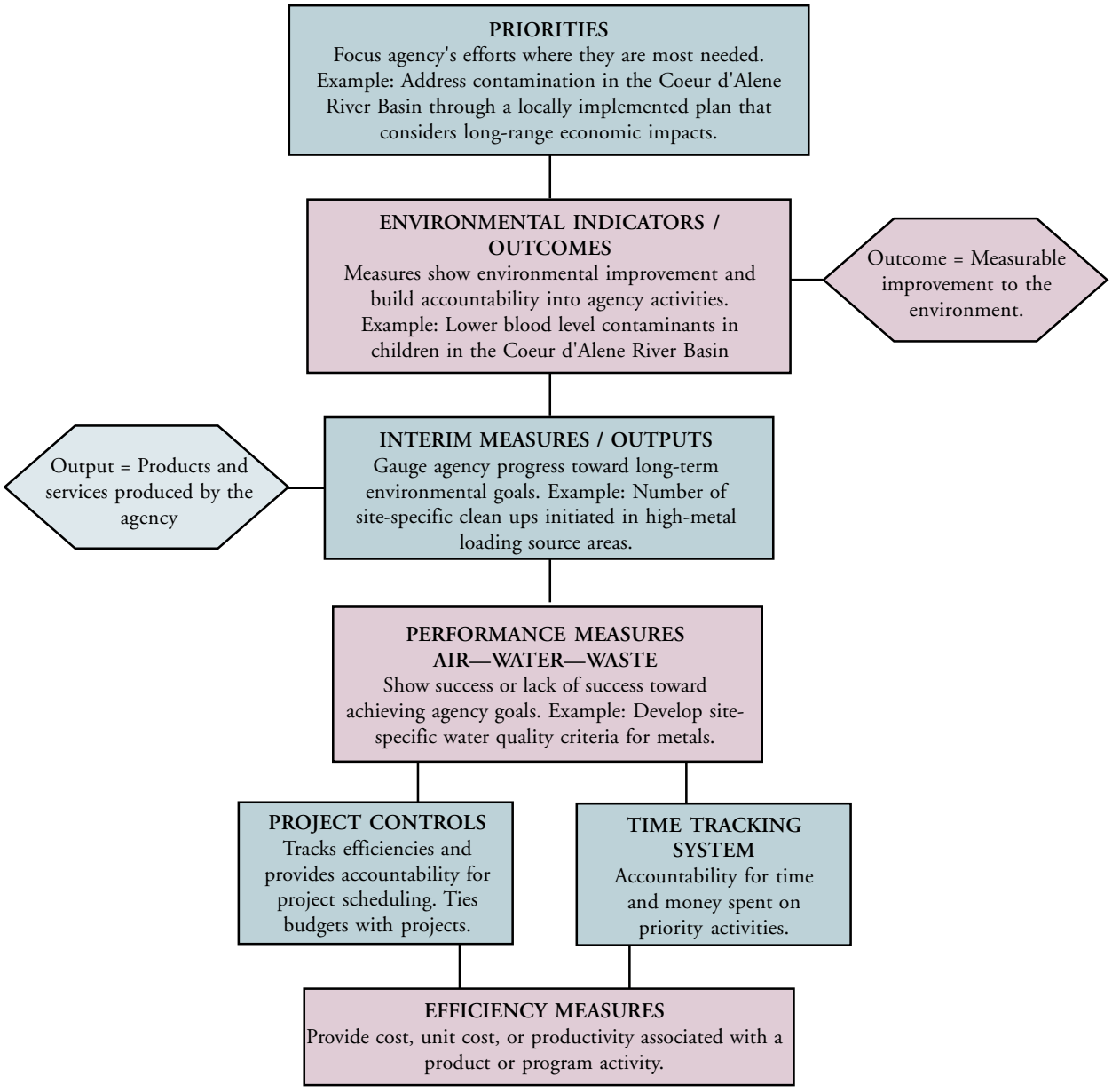


Planning for Success

Strategic Plan

and the Performance-Based Management System

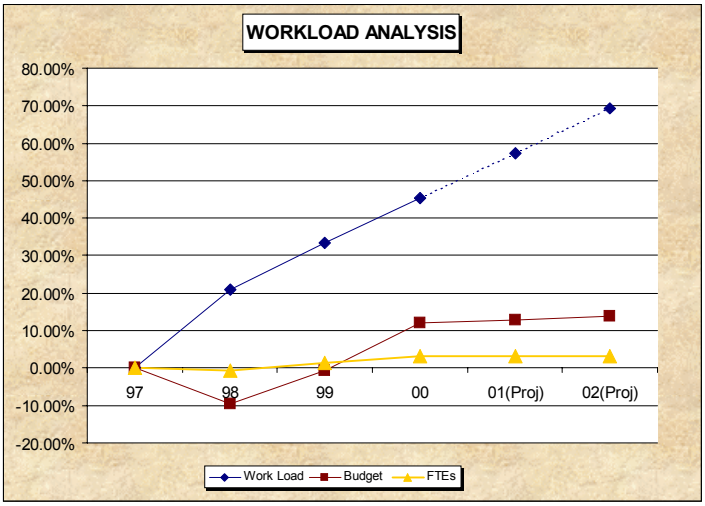
DEQ's 2001-2006 Strategic Plan identifies seven agency priorities for the next two to five years. The strategic planning process is a key piece of the management system geared toward positive environmental outcomes, accountability, and efficiency. The following chart displays the process for tracking performance and cost, citing examples from DEQ's 2001-2006 Strategic Plan.



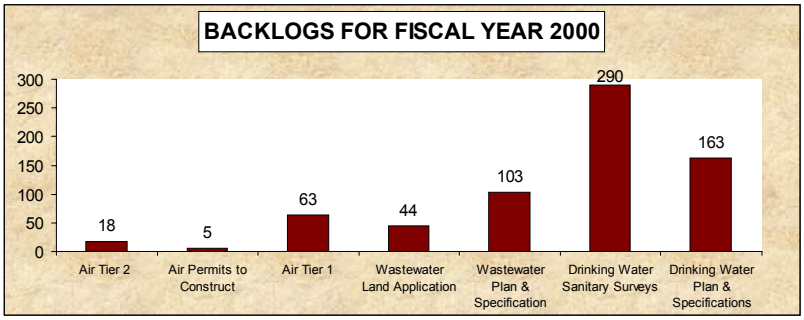
Forecasting and Workloads

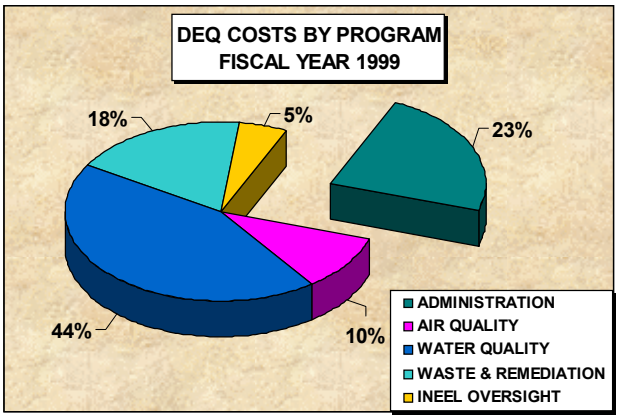
Workload Analysis

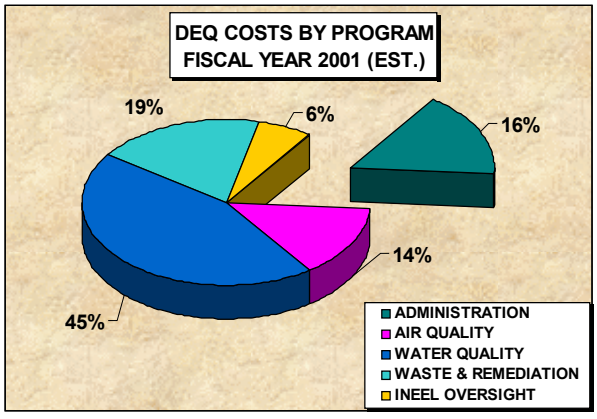
Workload analysis is done in order to project the future financial and manpower needs of the Department. The workload has increased by nearly 70% as seen in the "Workload Analysis" graph. In large part, this is due to increased permitting, ground water and surface water activities. In the same time period, DEQ's budget has increased by 14%. The strategic planning process and performance-based management system has allowed the agency to focus on the priority needs of the state while increasing efficiencies and productivity.



This increased workload has resulted in the development of backlogs of actions that DEQ needs to take. The "Backlogs" graph lists some of the backlogs that have developed. The backlogs are building, however, not at the rate that could be expected. This is due in part to efficiencies that are being gained through better use of resources and through the shifting of resources from overhead functions into direct program priorities.





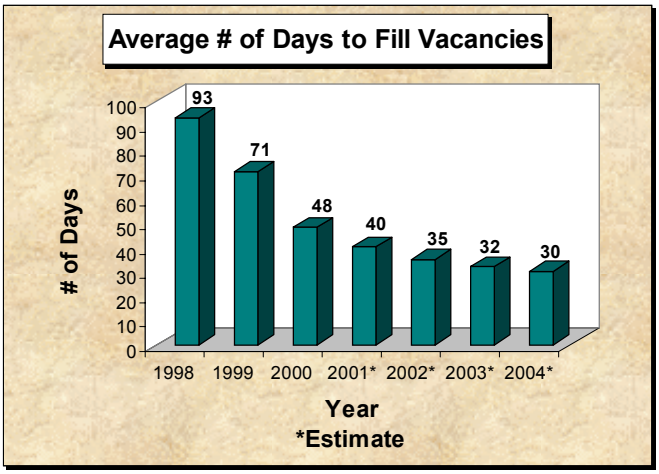


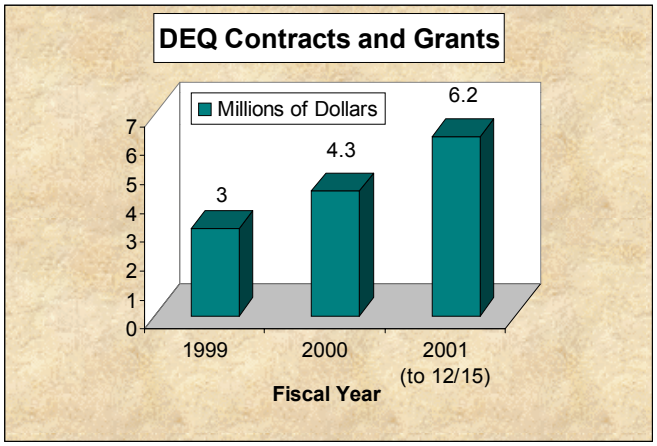
Last year DEQ revamped the classification structure in order to simplify and clarify the positions within DEQ. This has aided in recruiting and filling positions. The "Average # of Days" graph shows that the average days for filling vacancies has been reduced from 93 days to 48 days and is projected to be at 30 days by 2004. This allows DEQ to more efficiently utilize resources, rather than having positions remain vacant

DEQ has also supplemented it capabilities through the use of contracting for services that are not readily available within DEQ or for expertise that would not be needed on a long-term basis. Grants have also been used to aid local organizations and groups to implement local corrective actions. DEQ has increased its contracting by 50% since 1999.

Minimizing backlogs has also been aided through the development of the Technical Services Division. This has led to better and more efficient use of resources through cross-training of engineers and scientists in multiple programs. The products are scientifically sound and of high quality. It is expected that efficiencies will increase as DEQ learns to utilize Technical Services to its full capabilities.

Changes have been accomplished without sacrificing quality. During the last six months of the year 2000, DEQ recognized 45 employees for their outstanding performance. For example, the staff of the Underground Storage Tank / Leaking Underground Storage Tank (UST/LUST) program were recognized for their team efforts in protecting the health of Idaho citizens and the environment. The program consistently exceeded its performance goals and objectives.





UST Program:

- Increased compliance rate from 43% to 63%.

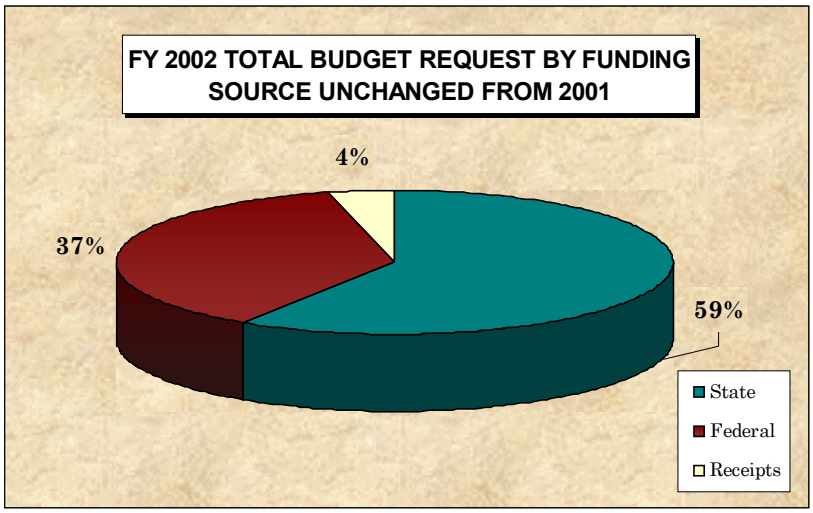
LUST Program:

- Sites cleaned up at the rate of 77%—one of the highest rates in the country.

Technical Services Division

- 70% of engineering staff cross-trained to work on engineering tasks in multiple media.
- Received and processed 115 air quality permits to construct.
- Technical Services staff is available to respond to peak air, water, or waste program workloads.
- Staff efficiency increased 30% as permitting staff completed assigned tasks and cross-trained in enforcement, air quality, water quality, and mining issues.
- In the past six months, developed a work breakdown structure for all DEQ projects (1,772). Time charges can now be identified to activity levels for all projects.

Budget Breakdown



CLEAN WATER STATE REVOLVING FUND BALANCE SHEET FOR THE ENDING OF THE FISCAL YEAR 1999 -2000

ASSETS	2000	1999
CURRENT ASSETS		
Cash	$37,465,393	$33,304,670
Interest Receivable - Fund Balance	66,670	142,280
Interest Receivable - Loans	951,788	432,426
Loans Receivable	1,282,494	1,250,139
TOTAL CURRENT ASSETS	39,766,345	35,129,515
LONG TERM ASSETS		
Interest Receivable - loans	82,349	0
Loans Receivable	51,503,701	39,356,378
TOTAL LONG TERM ASSETS	51,586,050	39,356,378
TOTAL ASSETS	$91,352,395	$74,485,893
LIABILITIES AND FUND EQUITY		
CURRENT LIABILITIES		
Due to DEQ Fund	$28,666	$98,768
Other Current Liabilities	17,087	17,329
TOTAL CURRENT LIABILITIES	45,753	116,097
FUND EQUITY		
Contributions From EPA	68,286,095	56,578,286
Contributions From State	13,657,219	11,315,658
Fund Balance	9,363,328	6,475,852
TOTAL FUND EQUITY	91,306,642	74,369,796
TOTAL LIABILITIES AND FUND EQUITY	$91,352,395	$74,485,893

DRINKING WATER STATE REVOLVING FUND BALANCE SHEET FOR THE ENDING OF THE FISCAL YEAR 1999-2000

ASSETS	2000	1999
CURRENT ASSETS		
Cash	$0	$0
TOTAL CURRENT ASSETS	0	0
LONG TERM ASSETS		
Interest Receivable - Loans	100,934	355
Loans Receivable	4,818,864	718,788
TOTAL LONG TERM ASSETS	4,919,798	719,143
TOTAL ASSETS	$4,919,798	$719,143
LIABILITIES AND FUND EQUITY		
CURRENT LIABILITIES		
Other Current Liabilities	$36,921	$14,186
Due to Cooperative - DEQ Fund	30,274	30,980
TOTAL CURRENT LIABILITIES	67,195	45,166
FUND EQUITY		
Contributions From EPA	4,520,415	910,099
Contributions From State	935,703	139,569
Fund Balance	-576,179	-375,701
TOTAL FUND EQUITY	4,879,939	673,967
TOTAL LIABILITIES AND FUND EQUITY	$4,947,134	$719,133

CLEAN WATER STATE REVOLVING FUND

Total Projected Need	
Wastewater Treatment	$313 million
Stormwater and Non-point Source	$128 million
Total Fund (July 1, 2001)	$129.3 million
Amount Loaned by end FY 2000	$106.5 million
Number Loans Awarded	48
Population Served by Projects Funded by the Loans Awarded	310,000 people
Total constructed value of wastewater treatment facilities ending FY 2000	$64.9 million

DRINKING WATER STATE REVOLVING FUND

Total Projected Need	$299.1 million
Total Fund (July 1, 2001)	$36.4 million
Amount Loaned by end FY 2000	$10.1 million
Number Loans Awarded	6
Population Served by Projects Funded by the Loans Awarded	54,677 people
***None of the projects for which funds were loaned had completed construction as of the end of FY 2000**	

Identifying Needs

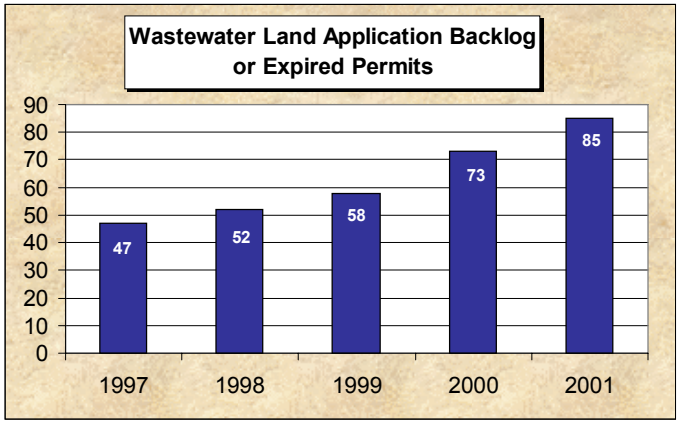
DEQ has assessed where Idaho's environment needs greater attention, and has examined its operations and responsibilities based on State legislative commitments to federal mandates. Where possible, programs shifted resources to these problem areas, before additional resources could be requested. DEQ's workload projections show pressing inadequacies in three areas that can affect human health, water, and air quality.

Coeur d'Alene River Basin

The State of Idaho is taking a major role to remedy water quality and natural resource damage associated with metals contamination in the Coeur d'Alene River Basin. DEQ has developed a comprehensive plan for the environmental and economic recovery of the Basin. The plan includes an in-depth feasibility study to evaluate and assess clean-up options, and a TMDL Implementation Plan to address surface water quality in the Silver Valley. A clean-up alternative will be selected early in 2001. The State will be instrumental in providing the environmental management and technical support to local decision-makers, and outreach efforts to interested stakeholders. Legislation is being proposed to establish a local group to manage long-term clean up, and to create a trust fund for long-term resource commitment to the project.

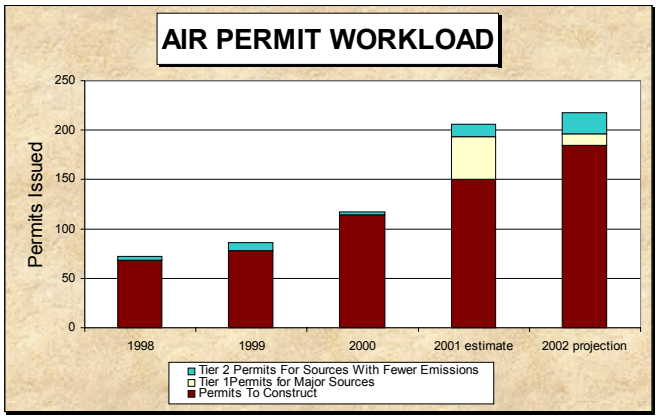
Wastewater Land Application

The wastewater land application program has experienced steady growth over the last ten years. In 1988, when the permit program was initiated, facilities were issued basic permits while they gathered sufficient data for review by DEQ. As new data arrives and new sites apply for permits, backlogs of expired permits and applications continue to climb. DEQ is focusing on areas of the state that have already experienced significant degradation in groundwater quality. As other potential contributors to groundwater degradation are explored, land application practices need oversight and timely permit issuance. Focusing additional resources towards reducing land application permit backlogs will serve Idaho's citizens as well as help restore degraded groundwater.

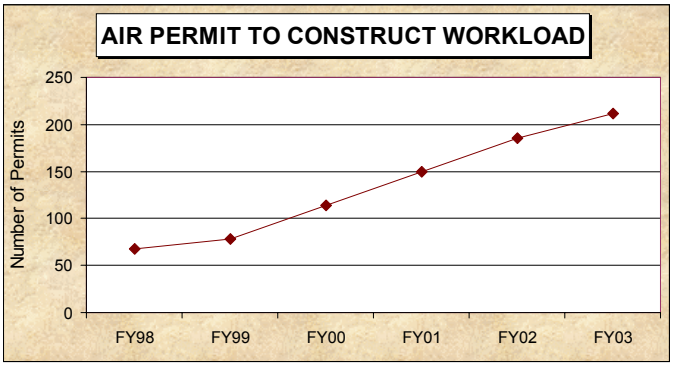


Airshed Management

In December 1999, the Portneuf Valley recorded three exceedances of the national air quality standards for particulate matter. Another exceedance in the next year may bring a federal designation of non-attainment to the area. The Treasure Valley has shown potential, under severe weather, for significant air quality problems. Sophisticated modeling is required to develop and evaluate control strategies that will correct existing and future air problems. DEQ needs resources with the necessary expertise to make this modeling effort successful.



Permits are required for new facilities and expansions to existing sources with air emissions. In the last three years, applications for these permits have increased by 72%. This increase is projected to continue into the near future. Workload trend analysis indicates a potential for delay in issuing permits to construct due to the volume of applications received. Additional resources to keep applications from bottlenecking are needed.



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